



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

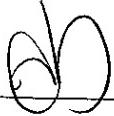
SL

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,794	11/13/2001	Gerard Howard Davies	ACO2694PIUS	9499
7590	01/14/2004			
Joan M McGillycuddy Akzo Nobel Inc Intellectual Property Department 7 Livingstone Avenue Dobbs Ferry, NY 10522-3408			EXAMINER	
			BARR, MICHAEL E	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

<b>Application No.</b> 09/936,794	<b>Applicant(s)</b> DAVIES ET AL. 
<b>Examiner</b> Michael Barr	<b>Art Unit</b> 1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### **Status**

- 1) Responsive to communication(s) filed on 27 October 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### **Disposition of Claims**

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### **Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### **Priority under 35 U.S.C. §§ 119 and 120**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
 a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### **Attachment(s)**

- |  |  |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                               | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____                                     |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/27/03 has been entered.

### ***Response to Arguments***

2. Applicant's arguments and amendments, filed 7/3/03 and entered as per the RCE papers filed 10/27/03, have been fully considered and reviewed by the examiner. The examiner acknowledges the addition of Claims 18-20. Claims 1-20 are pending.

The applicant argues that Sano et al. does not teach the claimed silica sol, since the applicant has defined the silica sol in terms of its SiO<sub>2</sub>/M<sub>2</sub>O mole ratio, as indicated in the specification. The examiner has reviewed the specification and arguments but does not find them convincing over the teachings of Sano et al. First, the specification does not provide any clear definition of a silica sol, only preferences, which are not binding to the claim interpretation. Second, the specification and claims indicate that silica sol have colloidal silica and a particular SiO<sub>2</sub>/M<sub>2</sub>O mole ratio, which Sano et al. teaches, as indicated in the previous office actions. Sano et al. clearly teaches a sol which contains colloidal silica and a SiO<sub>2</sub>/M<sub>2</sub>O mole ratio within the claimed requirements. Therefore, the examiner does not see how the sol taught by Sano et al.

does not meet the claimed requirements, as argued by the applicant. Thus, it remains the examiner's position that Sano et al. still teaches the claimed sol and process.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 7-8, 10, and 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Sano et al.

Sano et al. is applied here for the same reasons as given above and in paragraph 3 of the previous office action No. 10, mailed 1/30/03.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, 9, and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sano et al.

Sano et al. is applied here for the same reasons as given above and in paragraph 5 of the previous office action No. 10, mailed 1/30/03.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sano et al. as applied to claim 1 above, and further in view of Plueddemann.

Sano et al. and Plueddemann are applied here for the same reasons as given above and in paragraph 6 of the previous office action No. 10, mailed 1/30/03.

8. Claims 5-6 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sano et al. in view of van der Kolk et al.

Sano et al. and van der Kolk et al. are applied here for the same reasons as given above and in paragraph 7 of the previous office action No. 10, mailed 1/30/03. Sano et al. teaches that the silica particles used are smaller than 325 mesh (Col. 7, lines 1-3), which is inclusive of the claimed 3-100 nm particle size. Therefore, it would have been an obvious modification to the process of Sano et al. and van der Kolk to use a silica particle since within the claimed range, with the expectation of providing the desired coating results, since Sano et al. suggests such a particle size would be suitable in the coating composition. If the applicant can provide a showing of unexpected results from using the claimed particle size, then the examiner would withdraw the rejection.

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Barr whose telephone number is 571-272-1414. The examiner can normally be reached on Monday-Thursday 6:00 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on 571-272-1415. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Michael Barr  
Primary Examiner  
Art Unit 1762

MB  
January 7, 2004

